

Appl. No. 09/980,413
Reply to Office Action of July 7, 2003

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-7 (Canceled).

8. (Currently Amended) A mixture for use in tanning leather, said mixture comprising:

(I) a phosphorus-containing compound selected from the group consisting of

tris(hydroxymethyl)phosphine (THP);

tetrakis(hydroxymethyl)phosphonium salts (THP⁺salts);

condensates of THP with organic nitrogen compounds (THP condensates); and

compounds of the formula $RP(CH_2OH)_3$, wherein R is an organic group which does not react chemically with collagen in said leather (THP analogues); and

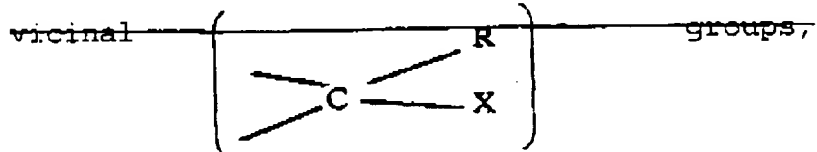
(II) at least one water-soluble moderator selected from the group consisting of

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(A) metaphosphate salts and

(B) aliphatic polyhydroxy or polypyrrolidone compounds

~~having at least three adjacent, geminal or~~



~~wherein R is selected from the group consisting of hydrogen and~~
~~alkyl and wherein X is selected from the group consisting of~~
~~hydroxyl and pyrrolidone~~ selected from the group consisting of
sorbitol, glycerol, trimethylolpropane, pentaerythritol,
mannitol, mono and di- saccharide sugars, alginates, polyvinyl
alcohol and polyvinyl pyrrolidone.

9. (Previously Presented)

The mixture of claim 8,

wherein said phosphorous containing compound consists essentially
of a condensate of from 2 to 6 moles THP with 1 mole urea.


10. (Currently Amended) The mixture of claim 8, wherein

said at least one water-soluble moderator is selected from the
group consisting of sorbitol, glycerol, trimethylolpropane,
pentaerythritol, mannitol, mono and di- saccharide sugars,
~~dialdehyde starch,~~ alginates, polyvinyl alcohol and polyvinyl
pyrrolidone.

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11. (Previously Presented) A method of tanning leather which comprises contacting the collagen in said leather with a tannage comprising the mixture of claim 8.

12. (Previously Presented) The method of claim 11, further comprising tanning said leather with a syntan and/or a mineral tannage and wherein said mixture is contacted with the collagen in said leather prior to, simultaneously with, or after tanning of said leather with the syntan and/or mineral tannage.



13. (Previously Presented) The method of claim 11, wherein said leather is fat liquored subsequent to said tanning.

14. (Previously Presented) The method of claim 11, wherein said leather is shaved and/or split subsequent to said tanning.

15. (New) The mixture of claim 8 wherein the water-soluble moderator is selected from the group consisting of said metaphosphate salts.

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16. (New) The mixture of claim 8 comprising a 20:1 molar excess of THP to equimolar amounts of THP based on the compounds of formula $RP(CH_2OH)_3$.

ad 17. (New) The mixture of claim 16 wherein the THP molar ratio to the compound of formula $RP(CH_2CH)_3$ is 10:1 to 2:1.
